

Plan du cours

Chapitre I) Structure interne de la terre

I.1. Origine de la Planète Terre

I.2. Structure interne de la Terre

Chapitre II) De la dérive des Continent à la Tectonique des Plaques

II.1 - Historique

II.2- Théorie de la dérive des continent: Arguments de Wegener

II.3 – L'après Wegener et naissance de la Tectonique des plaques

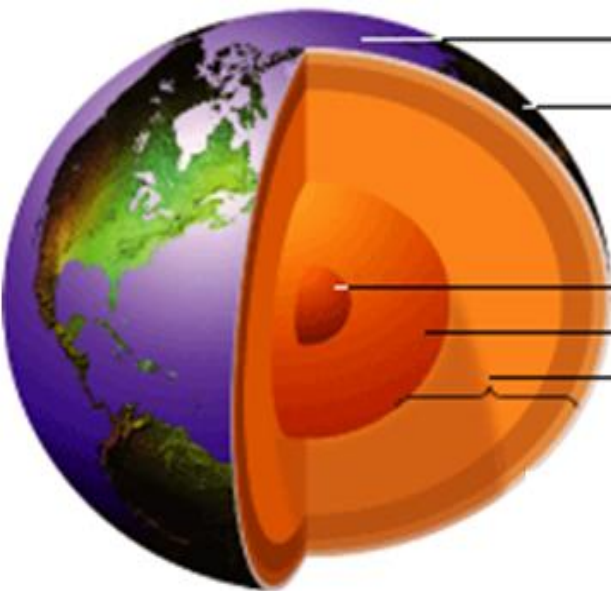
II.3 –Tectonique des plaques: Bilan et moteur

Chapitre III

III-1- les limites divergentes et l'expansion océanique

les rifts continentaux

Formation des océans



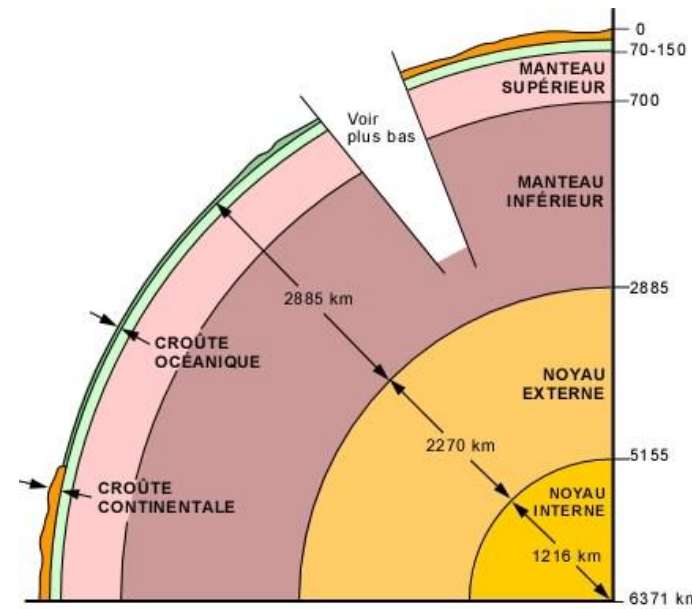
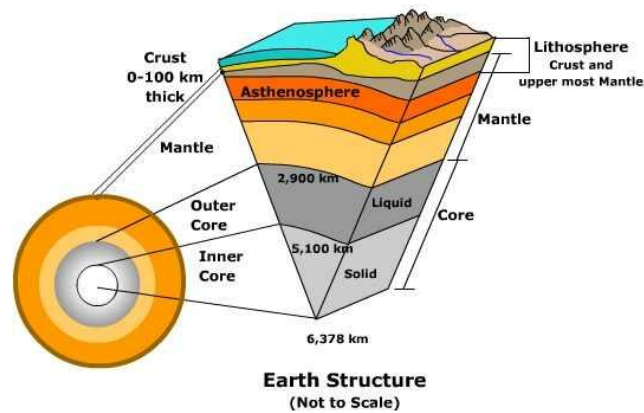
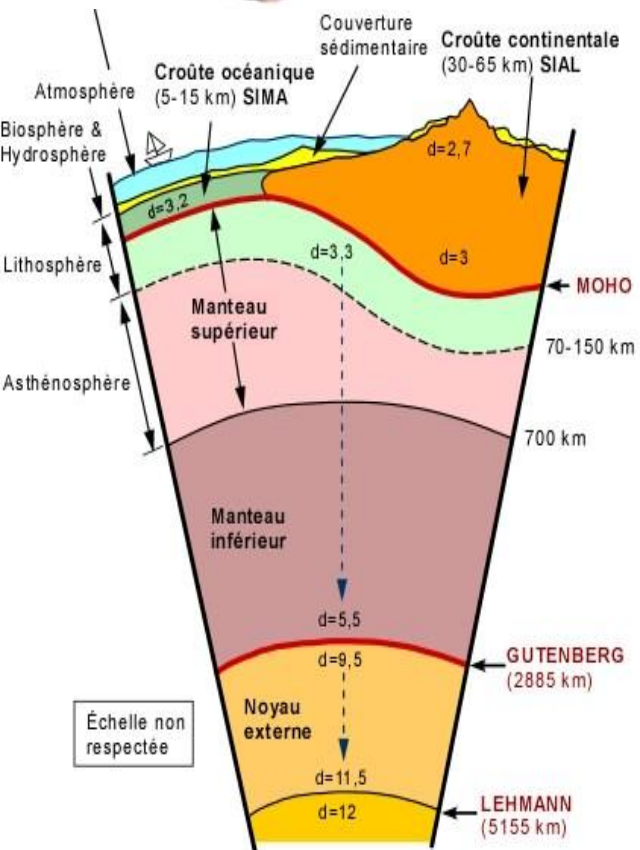
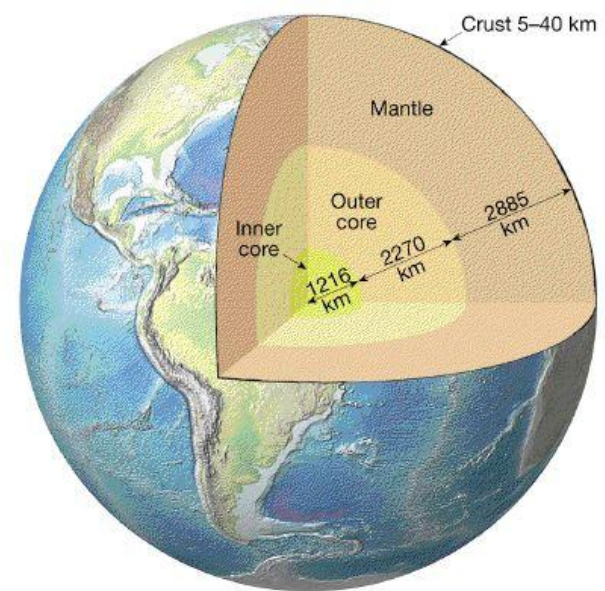
Croûte océanique

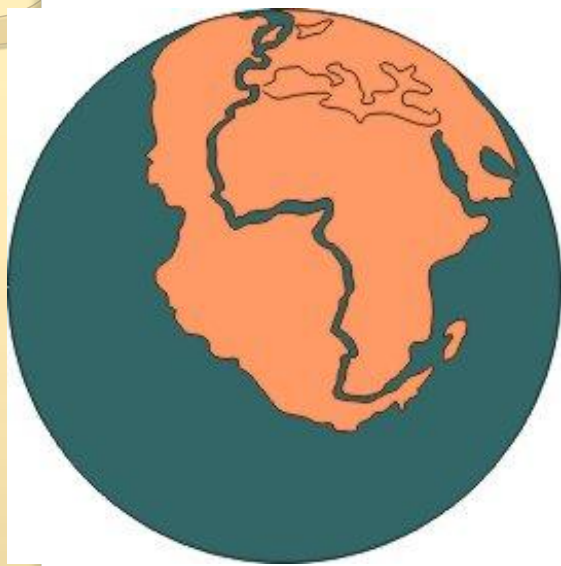
Croûte continentale

Noyau liquide

Noyau solide

Manteau



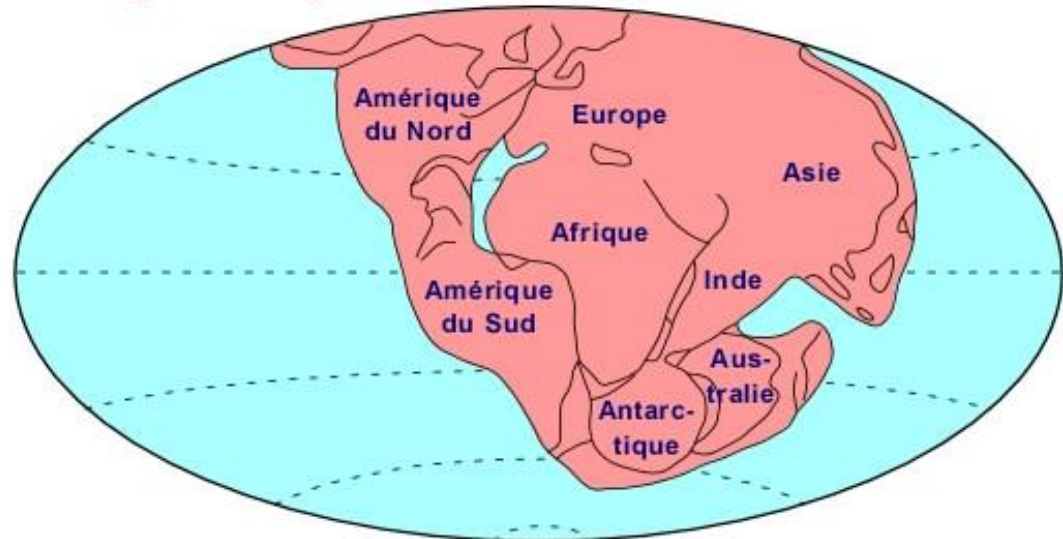


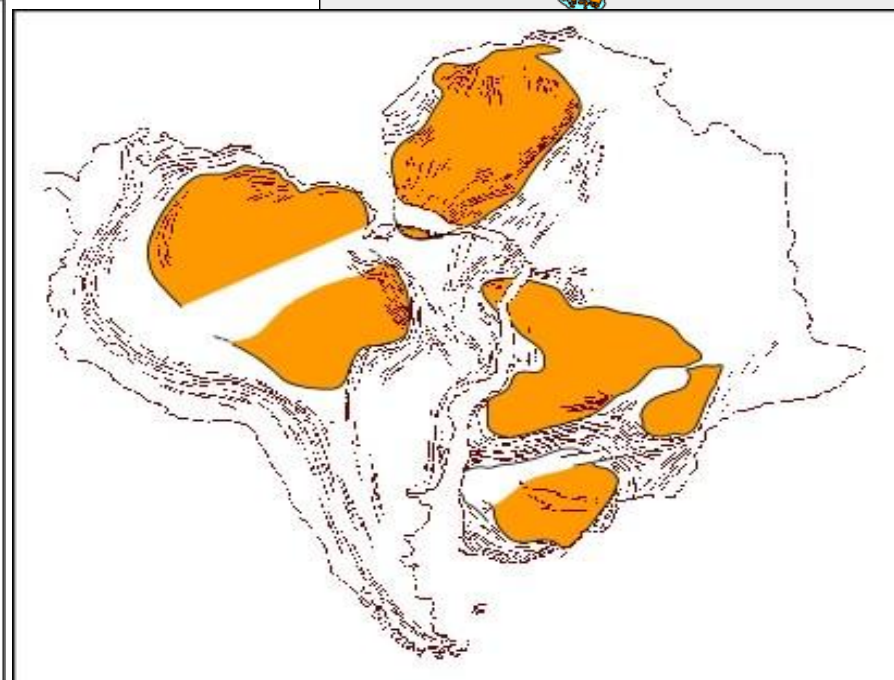
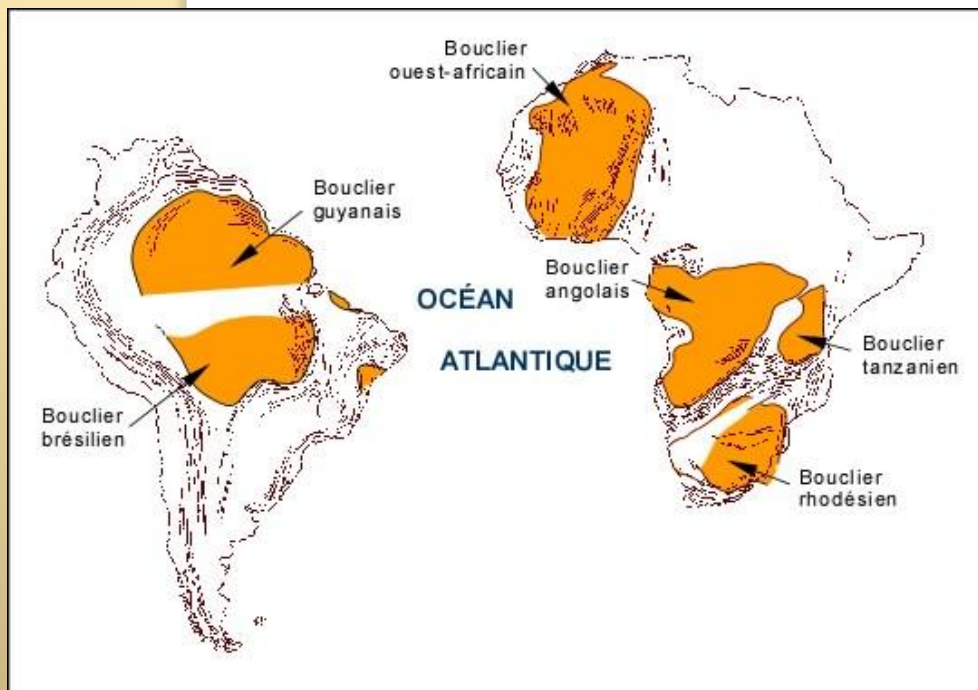
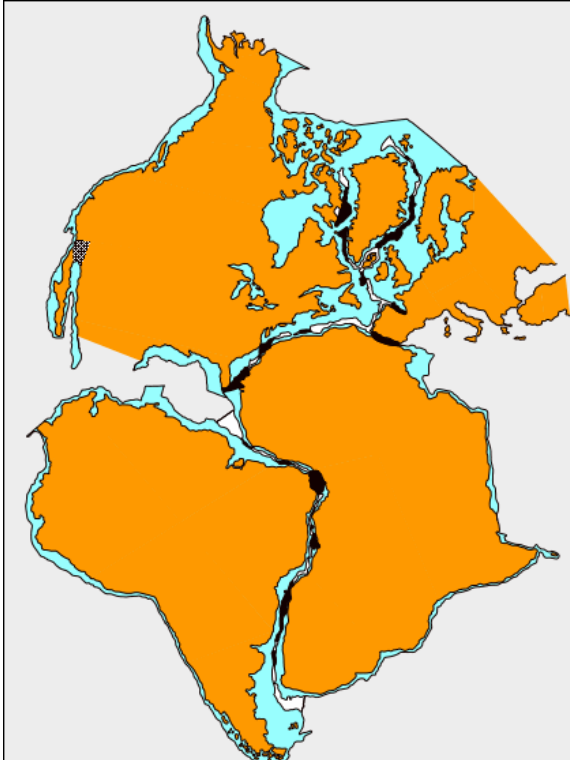
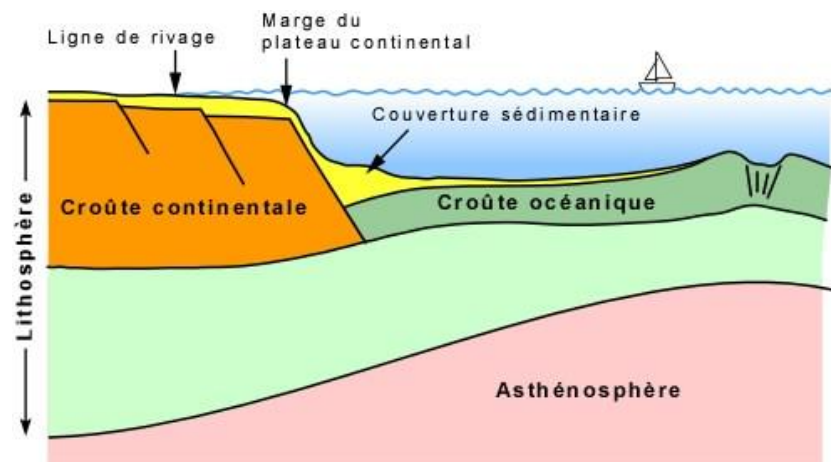
Reconstitution du continent primitif "d'avant le déluge" d'après Snider-Pellegrini.

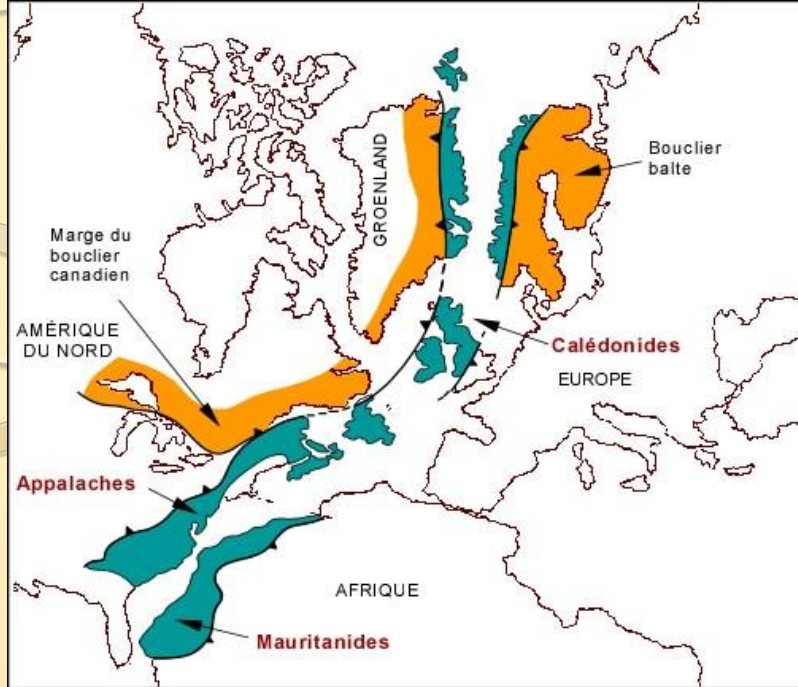
Position actuelle des continents



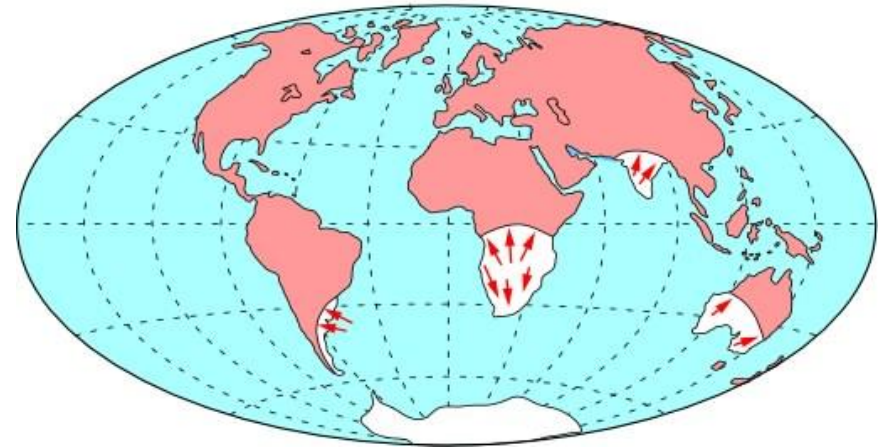
La Pangée de Wegener



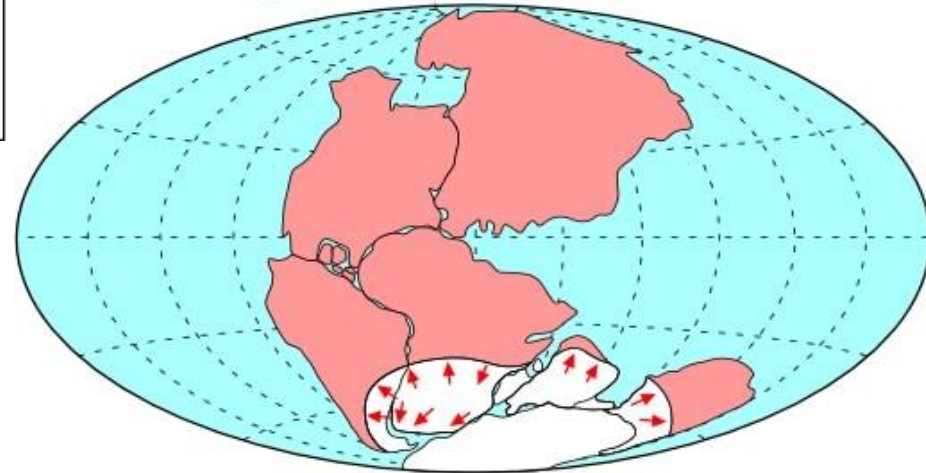


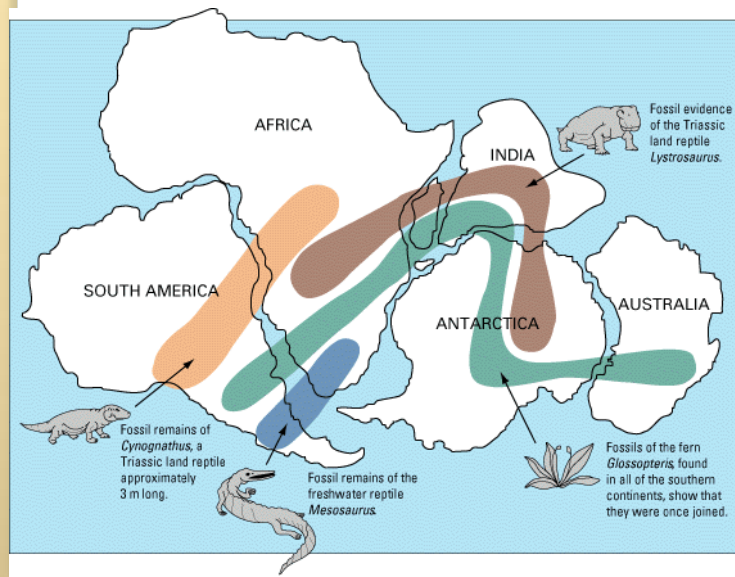
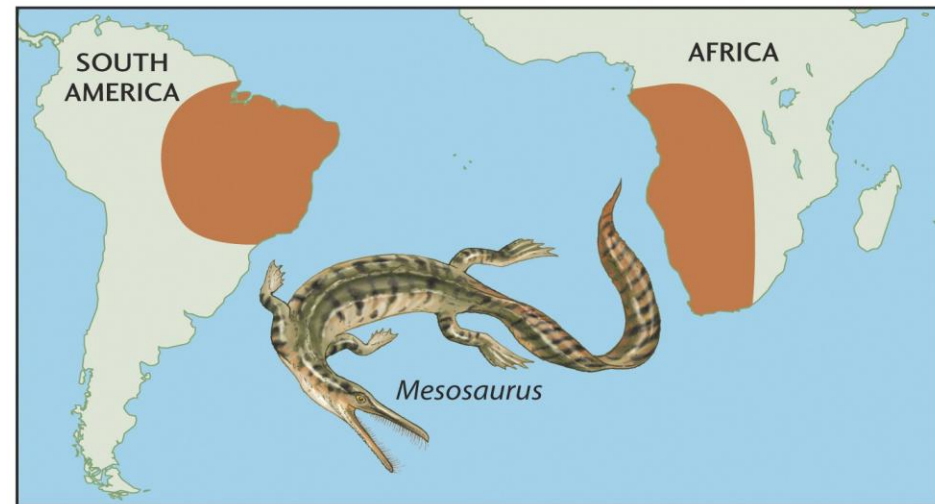
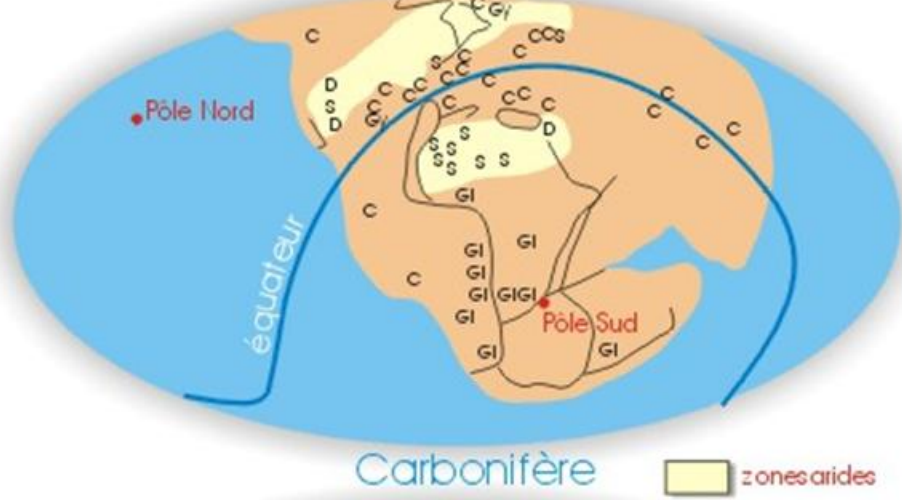


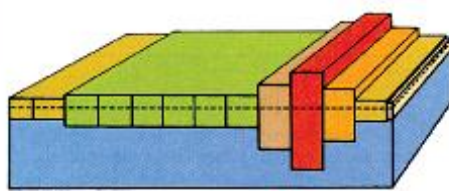
→ sens d'écoulement de la glace



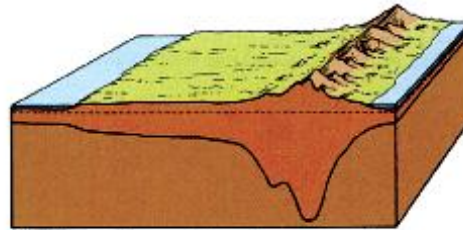
La solution de Wegener



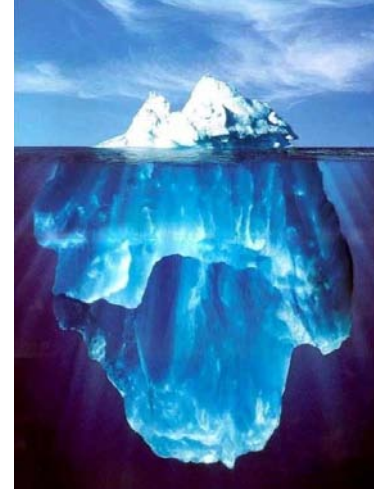




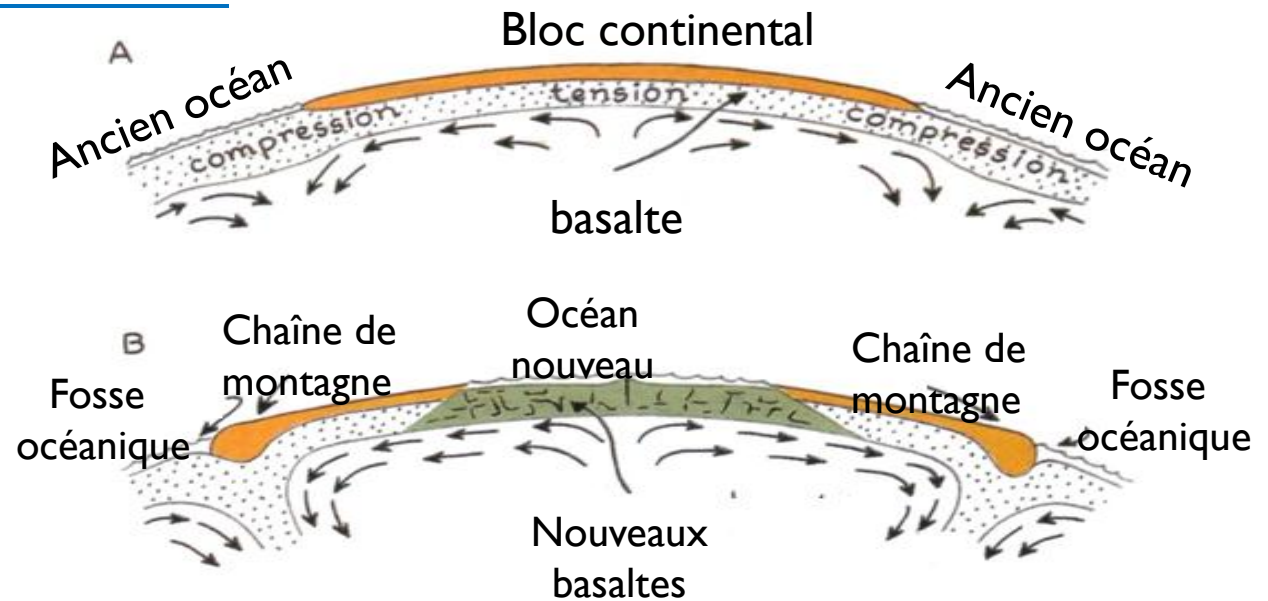
(A) Floating blocks of equal density. Thicker blocks rise higher and sink deeper.

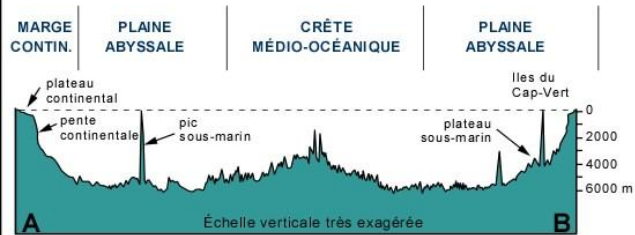
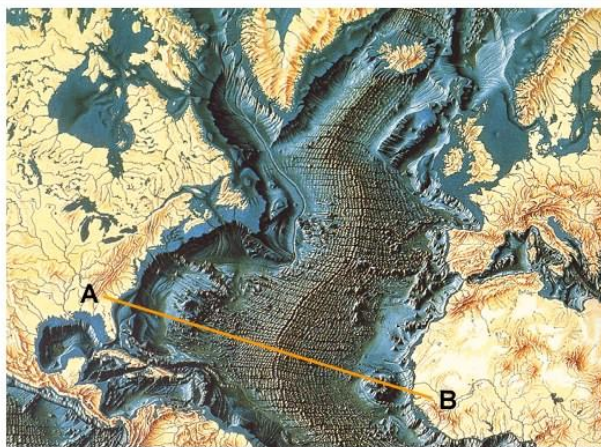


(C) High mountains are balanced by a deep root.

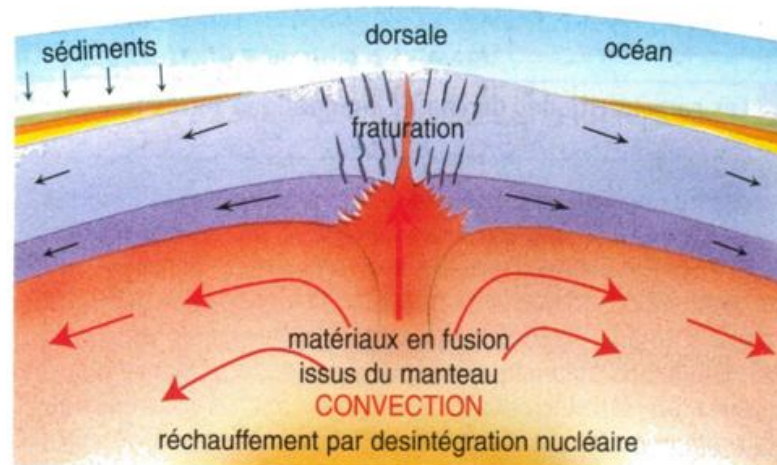
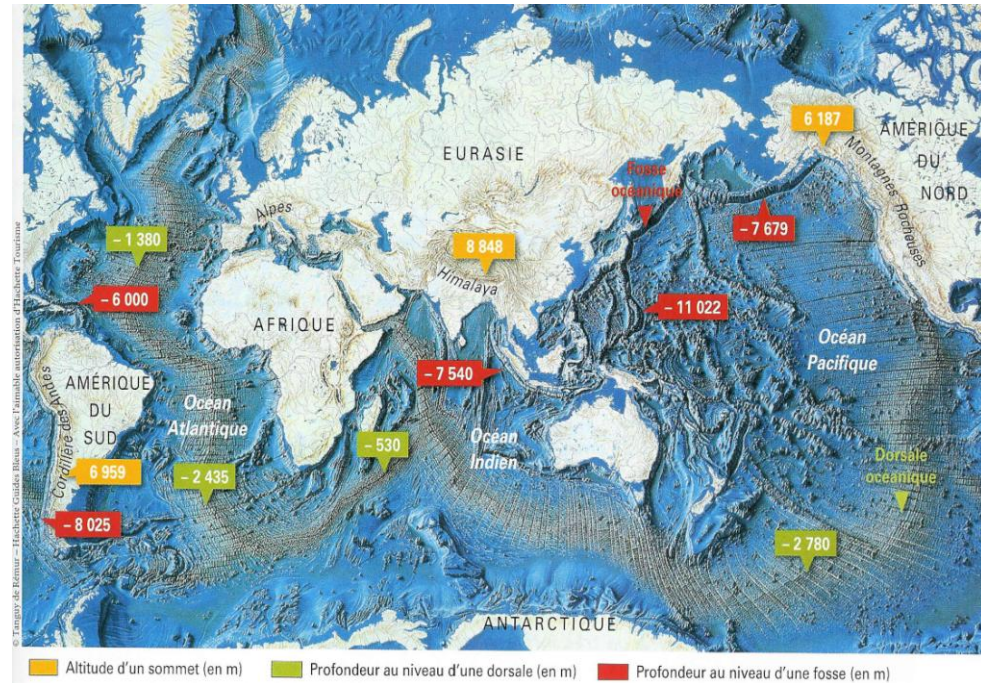


Modèle de Holmes



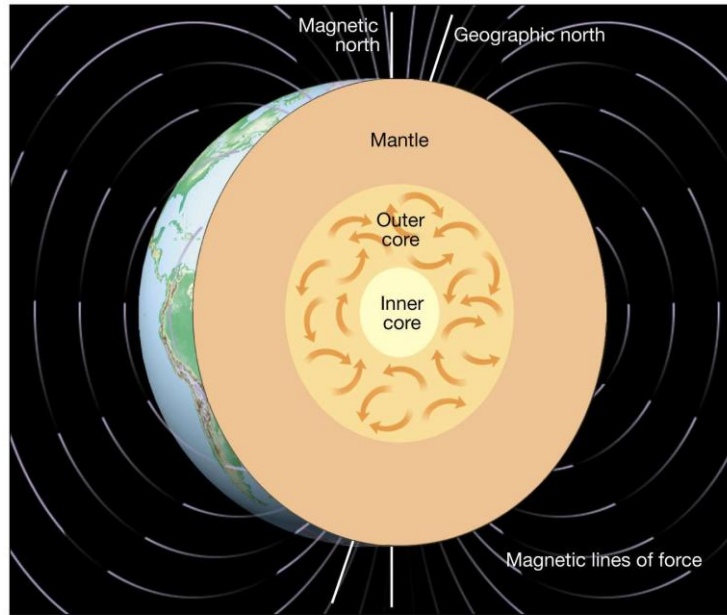


Ce profil à travers l'Atlantique-Nord va du Cap Hatteras (USA) au Cap Vert (Afrique); il montre les principaux éléments du relief des fonds océaniques. Il n'y manque que les fosses profondes (jusqu'à 11 000 m) qu'on retrouve au pourtour du Pacifique.

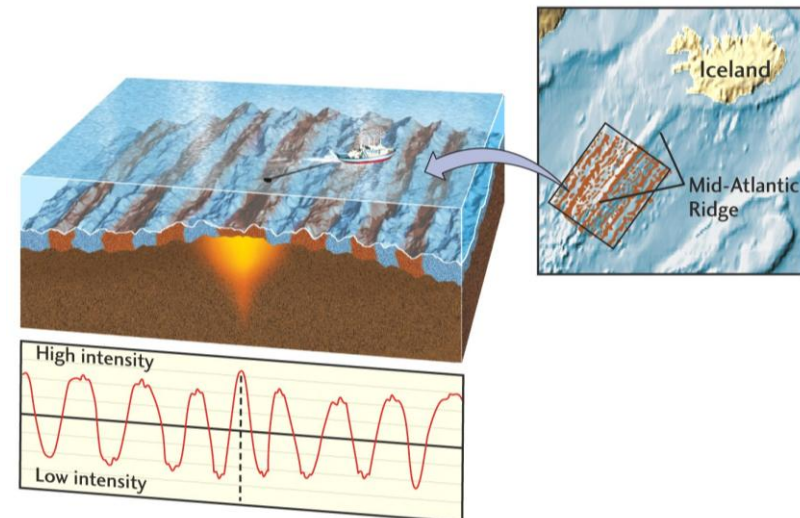
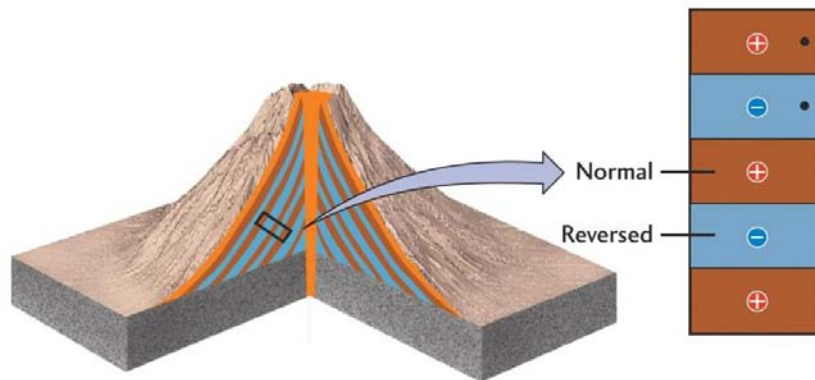
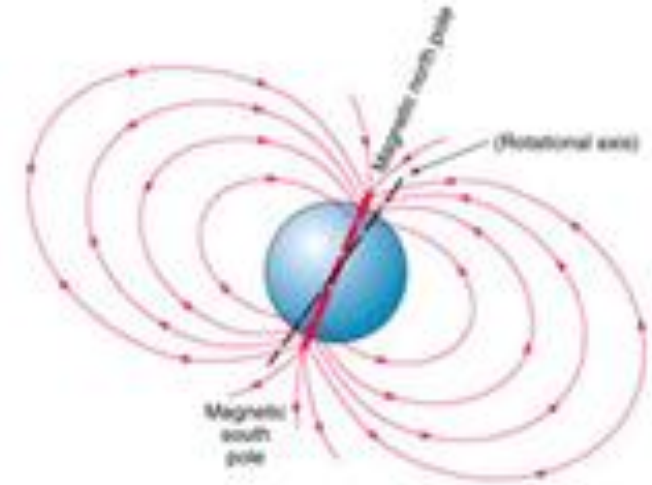


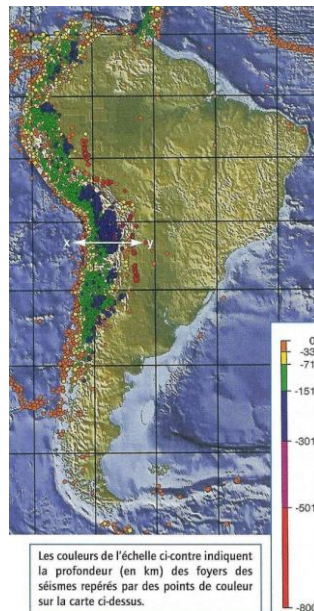
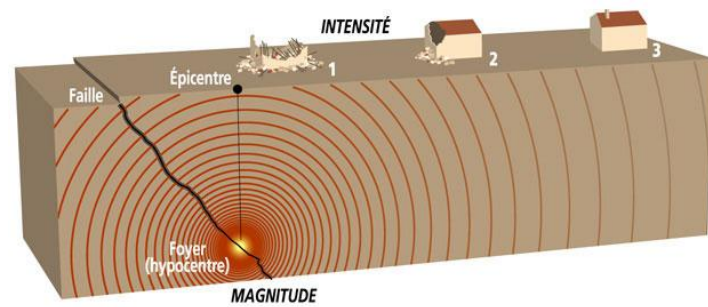
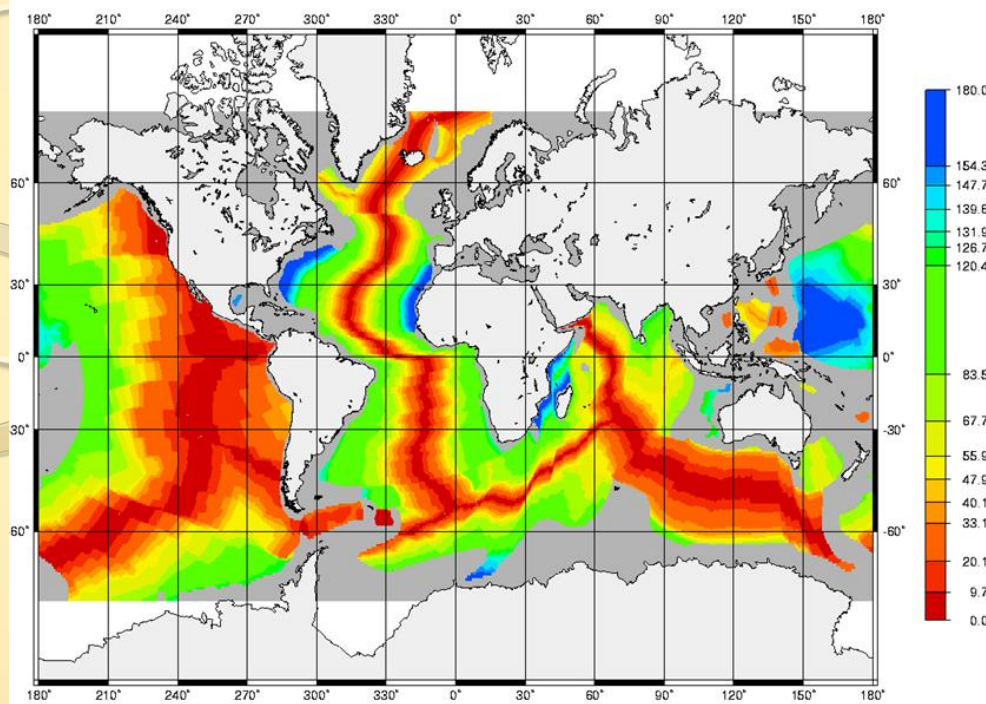
modèle d'HARRY HESS – 1962

Champs magnétique terrestre



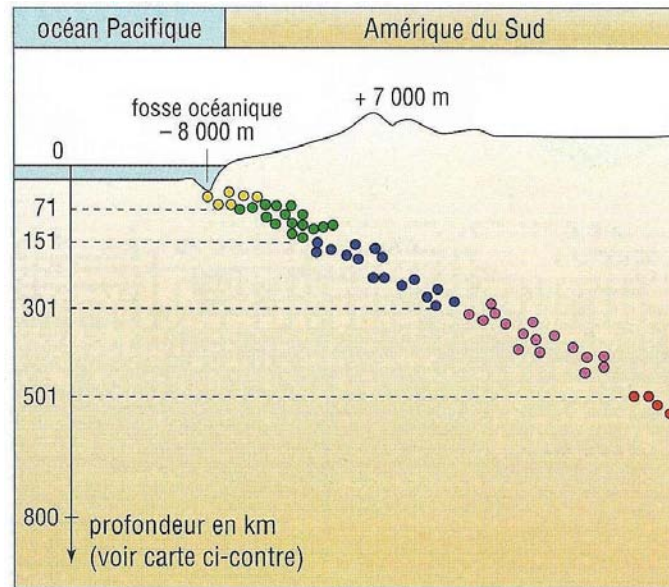
Copyright © 2005 Pearson Prentice Hall, Inc.



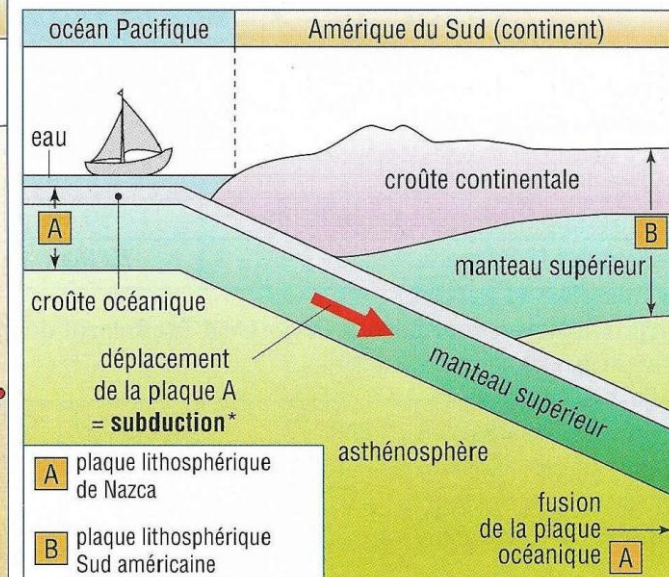


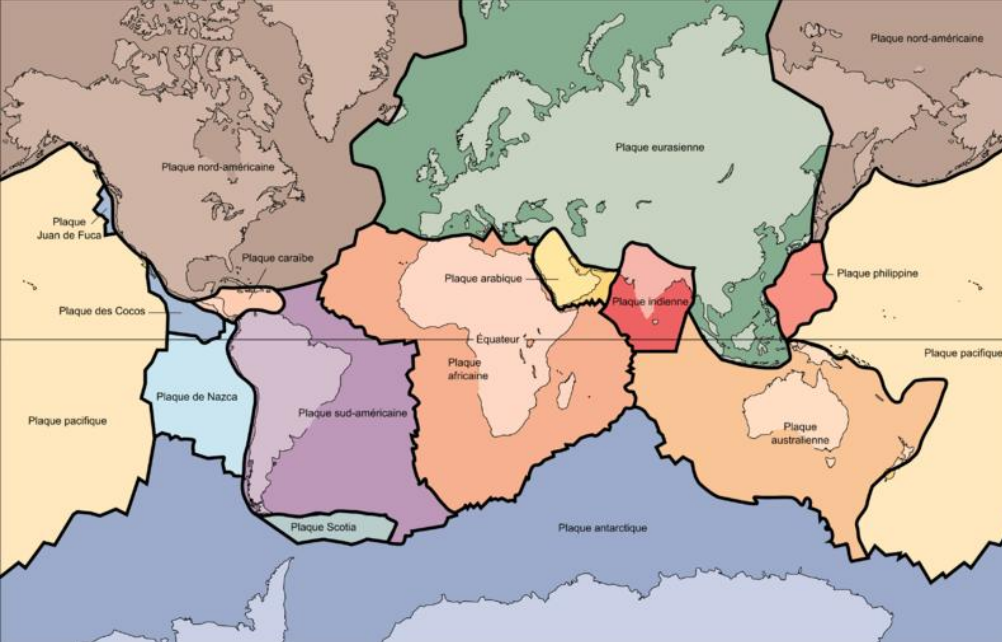
Les couleurs de l'échelle ci-contre indiquent la profondeur (en km) des foyers des séismes repérés par des points de couleur sur la carte ci-dessus.

Des séismes plus ou moins profonds le long de la côte Ouest de l'Amérique du Sud.



Répartition des foyers des séismes





SISMICITE MODIALE : 30 ans - 17 000 seismes de magnitude superieure à 4.5

